(19) World Intellectual Property Organization International Bureau





(43) International Publication Date 22 March 2001 (22.03.2001)

PCT

(10) International Publication Number WO 01/19996 A1

- (51) International Patent Classification7: C12N 15/31, 15/62, C07K 14/21, 16/12, A61K 31/711, 39/02, 39/40
- (21) International Application Number: PCT/EP00/09035
- (22) International Filing Date:

14 September 2000 (14.09.2000)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

9921691.3

14 September 1999 (14.09.1999)

- (71) Applicant (for all designated States except US): SMITHKLINE BEECHAM BIOLOGICALS [BE/BE]; Rue de l'Institut 89, B-1330 Rixensart (BE).
- (72) Inventor; and
- (75) Inventor/Applicant (for US only): THONNARD, Joelle [BE/BE]; SmithKline Beecham Biologicals S.A., Rue de L'Institut 89, B-1330 Rixensart (BE).
- (74) Agent: PRIVETT, Kathryn, Louise; SmithKline Beecham, Two New Horizons Court, Brentford, Middlesex TW8 9EP (GB).

- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.
- (84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

Published:

- With international search report.
- Before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments.

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.



(54) Title: MORAXELLA CATARRHALIS ANTIGEN, CORRESPONDING GENE AND USES THEREOF

(57) Abstract: The invention provides BASB109 polypeptides and polynucleotides encoding BASB109 polypeptides and methods for producing such polypeptides by recombinant techniques. Also provided are diagnostic, prophylactic and therapeutic uses.